

Lithium metal battery

Article Information Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (According to HCS-2012 APPENDIX D TO §1910.1200)

Issue date: 09/09/2021

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Version: 1.0

Safety Data Sheet is not available to article according to the OSHA Hazard Communication Standard 29 CFR 1910.1200, so AIS is provided instead of SDS.

Batteries are considered Articles under Global Harmonized Standards. This Article Information Sheet is provided according to the request of the customers.

SECTION 1: Identification

1.1. Identification

Product form : Article
Trade name : Lithium metal battery

1.2. Recommended use and restrictions on use

Recommended use : Battery
Restrictions on use : No information available

1.3. Supplier

Supplier

Yuyao Johnson Eletek Co.,Ltd
Shuimotan 113 Nanmiao Lizhou Street, Yuyao City, Zhejiang Province, China.

T +86-574-62571413 - F +86-574-62579155

Importer:

Address:

Tel:

E-mail:

1.4. Emergency telephone number

Emergency number :

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

The batteries are not hazardous when used according to the instructions of manufacturer under normal conditions. In case of abuse, there's risk of rupture, fire, heat, leakage of internal components, which could cause casualty loss. Abuses include but not limited to the following cases: short circuited, put into fire, whacked with hard object, punctured with acute object, crushed, and broken.

In the case of rupture, the following hazards may expose:

Skin corrosion/irritation, Category 2

Causes skin irritation.

Serious eye damage/eye irritation, Category 1

Causes serious eye damage.

Reproductive toxicity, Category 1B

May damage fertility or the unborn child.

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)

:



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: Causes skin irritation.

Causes serious eye damage.

May damage fertility or the unborn child.

Precautionary statements (GHS US)

: Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wash hands, forearms and face thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with plenty of water.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If exposed or concerned: Get medical advice/attention.
Immediately call a poison center or doctor.
Specific treatment (see supplemental first aid instruction on this label).
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Stainless steel	CAS-No.: 12597-68-1	50.5
Manganese oxide (MnO ₂)	CAS-No.: 1313-13-9	30.99
Perchloric acid, lithium salt	CAS-No.: 7791-03-9	4
Polypropylene	CAS-No.: 9003-07-0	3.76
Propylene carbonate	CAS-No.: 108-32-7	3
Polytetrafluoroethylene	CAS-No.: 9002-84-0	2.17
Graphite	CAS-No.: 7782-42-5	2.17
Lithium	CAS-No.: 7439-93-2	1.91
Ethylene glycol dimethyl ether	CAS-No.: 110-71-4	1.5

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : No information available.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Remove all sources of ignition. Wear personal protective equipment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Eliminate every possible source of ignition. Ensure adequate ventilation. Stop leak if safe to do so.

6.1.1. For non-emergency personnel

Protective equipment : Wear personal protective equipment.

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Absorb and/or contain spill with inert material (sand), then place in suitable container.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Never swallow. Never charge. Never heat. Never expose to open flame. Never disassemble. Never reverse the positive and negative terminals when mounting. Never short-circuit the battery. Never weld the terminal or wire to the body of the battery directly. Never use different batteries together. Never touch the liquid leaked out of battery. Never bring fire close to battery liquid. Never keep in touch with battery.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Never store the battery in hot and high humid place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Stainless steel (12597-68-1)

No additional information available

Manganese oxide (MnO₂) (1313-13-9)

No additional information available

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Polypropylene (9003-07-0)

No additional information available

Perchloric acid, lithium salt (7791-03-9)

No additional information available

Propylene carbonate (108-32-7)

No additional information available

Polytetrafluoroethylene (9002-84-0)

No additional information available

Graphite (7782-42-5)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA	2 mg/m ³ (all forms except graphite fibers-respirable particulate matter)
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USA - OSHA - Occupational Exposure Limits

OSHA PEL TWA [1]	15 mg/m ³ (synthetic-total dust) 5 mg/m ³ (synthetic-respirable fraction)
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USA - IDLH - Occupational Exposure Limits

IDLH	1250 mg/m ³
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USA - NIOSH - Occupational Exposure Limits

NIOSH REL TWA	2.5 mg/m ³ (natural-respirable dust)
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Lithium (7439-93-2)

No additional information available

Ethylene glycol dimethyl ether (110-71-4)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: No engineering measure is necessary during normal use. If internal cell materials are leaked, the information in Section 4 & Section 6 will be useful.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Metallic color(without outer PVC cover)
Odour	: No data available

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Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: Not applicable
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Open flame. Overheating. sparks.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Hydrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Manganese oxide (MnO₂) (1313-13-9)

LD50 oral rat	9000 mg/kg
ATE US (oral)	9000 mg/kg bodyweight

Propylene carbonate (108-32-7)

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 3000 mg/kg
ATE US (oral)	29000 mg/kg bodyweight

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Ethylene glycol dimethyl ether (110-71-4)

LD50 oral rat	> 4000 mg/kg
LD50 dermal rabbit	1000 – 2000 mg/kg
LC50 Inhalation - Rat	20 – 63 mg/l (Exposure time: 6 h)
ATE US (dermal)	1000 mg/kg bodyweight
ATE US (vapours)	20 mg/l/4h
ATE US (dust,mist)	20 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
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Propylene carbonate (108-32-7)

LC50 - Fish [1]	> 1000 mg/l Test organisms (species): Cyprinus carpio
EC50 - Crustacea [1]	> 1000 mg/l Test organisms (species): Daphnia magna

Graphite (7782-42-5)

LC50 - Fish [1]	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	47 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Manganese oxide (MnO₂) (1313-13-9)

BCF - Fish [1]	(no bioaccumulation expected)
Partition coefficient n-octanol/water (Log Pow)	< 0 (at 20 °C)

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Propylene carbonate (108-32-7)

Partition coefficient n-octanol/water (Log Pow)	0.48 (at 25 °C)
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated (batteries are not subject to the dangerous goods regulations provided they meet the requirements contained in the following special provisions: 49 CFR 172.102 Provision 130)

Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

Air transport

Regulated as hazardous materials by the IATA, passes the test UN38.3.

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Stainless steel	12597-68-1			
Manganese oxide (MnO ₂)	1313-13-9	Present	Active	
Polypropylene	9003-07-0	Present	Active	XU
Perchloric acid, lithium salt	7791-03-9	Present	Active	XU
Propylene carbonate	108-32-7	Present	Active	XU
Polytetrafluoroethylene	9002-84-0	Present	Active	XU
Graphite	7782-42-5	Present	Active	XU
Lithium	7439-93-2	Present	Active	XU
Ethylene glycol dimethyl ether	110-71-4	Present	Active	S

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15.2. International regulations

CANADA

Manganese oxide (MnO₂) (1313-13-9)

Listed on the Canadian DSL (Domestic Substances List)

Polypropylene (9003-07-0)

Listed on the Canadian DSL (Domestic Substances List)

Perchloric acid, lithium salt (7791-03-9)

Listed on the Canadian DSL (Domestic Substances List)

Propylene carbonate (108-32-7)

Listed on the Canadian DSL (Domestic Substances List)

Polytetrafluoroethylene (9002-84-0)

Listed on the Canadian DSL (Domestic Substances List)

Graphite (7782-42-5)

Listed on the Canadian DSL (Domestic Substances List)

Lithium (7439-93-2)

Listed on the Canadian DSL (Domestic Substances List)

Ethylene glycol dimethyl ether (110-71-4)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Manganese oxide (MnO₂) (1313-13-9)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Perchloric acid, lithium salt (7791-03-9)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Propylene carbonate (108-32-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Graphite (7782-42-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Lithium (7439-93-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

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Ethylene glycol dimethyl ether (110-71-4)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Stainless steel (12597-68-1)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Manganese oxide (MnO₂) (1313-13-9)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Polypropylene (9003-07-0)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Perchloric acid, lithium salt (7791-03-9)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Propylene carbonate (108-32-7)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
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Polytetrafluoroethylene (9002-84-0)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Graphite (7782-42-5)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Lithium (7439-93-2)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Ethylene glycol dimethyl ether (110-71-4)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

No additional information available

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (According to HCS-2012 APPENDIX D TO §1910.1200)

Revision date : 09/09/2021

Data sources : LOLI. ECHA reference.

Abbreviations and acronyms:

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ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
EC50	Median effective concentration
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
LC50	Median lethal concentration
LD50	Median lethal dose
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



SAFETY DATA SHEET FOR A NON-SPILLABLE BATTERY

1. IDENTIFICATION

Product Name: Absorbed Glass Mat Lead Acid Battery Synonyms: AGM battery, Non-Spillable battery; Valve regulated battery.	Product Use: To start a piston engine or as a deep-cycle battery Supplier: Interstate Batteries, Inc. Address: 12770 Merit Drive, Suite 300 Dallas, Texas 75251
General Information Number: (972)991-1444, Ext. 6672 and 6663 Revision Number 10; Revision Date: June 18, 2019	Emergency number: CHEMTEL: 1-800-255-3924

NOTE: A non-spillable battery is considered an article as defined by 29 CFR 1910.1200 (OSHA Hazard Communication Standard). The information contained in this SDS is supplied at the customer's request for information only.

2. HAZARD(S) IDENTIFICATION

Health		Environmental	Physical
Acute Toxicity (Oral, dermal, inhalation)	Category 4	Aquatic Chronic 1 Very toxic to aquatic life with long-lasting effects.	Explosive Chemical, Division 1.3
Skin corrosion/irritation	Category 1A		
Eye Damage	Category 1	Aquatic Acute 1	
Reproductive	Category 1A	Very toxic to aquatic life.	
Carcinogenicity (lead)	Category 1B		
Carcinogenicity (acid mist)	Category 1A		
Specific target organ toxicity (repeated exposure)	Category 2		

Label Elements:

Health	Environmental	Physical

Hazard Statements DANGER! Causes severe skin burns Causes serious eye damage. May damage fertility or the unborn child if ingested or inhaled. May cause cancer if ingested or inhaled. Causes damage to central nervous system, blood and kidneys through prolonged or repeated exposure. May form explosive air/gas mixture during charging. Extremely flammable gas (hydrogen). Explosive, fire, blast or projection hazard. Harmful if swallowed, Harmful in contact with skin, Harmful if inhaled.	Precautionary Statements Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing, eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Causes skin irritation, serious eye damage. Contact with internal components may cause irritation or severe burns. Avoid contact with internal acid. Irritating to eyes, respiratory system, and skin.
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Additional Information:

May form explosive air/gas mixture during charging

Abnormal Conditions (due to a Broken Case or Extreme Overcharging)

• Causes severe skin burns and eye damage • Causes serious eye damage • May form explosive air/gas mixture during charging • Extremely flammable gas (hydrogen) • Explosive, fire, blast or projection hazard

3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS (Chemical/Common Names):	CAS No.:	% by Wt:
Inorganic Lead/Lead Compounds	7439-92-1	72
Sulfuric Acid absorbed in Glass-Fiber Material	7664-93-9	28

Composition Comments

All concentrations are in percent by weight.

4. FIRST AID MEASURES

Note: Under normal conditions of battery use, internal components will not present a health hazard. The following information is provided for battery electrolyte (acid) and lead for exposures that may occur during battery production or container breakage or under extreme heat conditions such as fire.

Inhalation	Sulfuric Acid: Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician. Lead: Remove from exposure, gargle, wash nose and lips; consult physician.
Skin contact	Sulfuric Acid: Flush with large amounts of water for at least 15 minutes; remove contaminated clothing completely, including shoes. If symptoms persist, seek medical attention. Wash contaminated clothing before reuse. Discard contaminated shoes. Lead: Wash immediately with soap and water.
Eye contact	Sulfuric Acid and Lead: Flush immediately with large amounts of water for at least 15 minutes while lifting lids; Seek immediate medical attention if eyes have been exposed directly to acid.
Ingestion	Sulfuric Acid: Give large quantities of water; Do NOT induce vomiting or aspiration into the lungs may occur and can cause permanent injury or death; consult physician. Lead: Consult physician immediately.

5. FIRE FIGHTING MEASURES

Flash Point	Not applicable unless individual components exposed.
Auto ignition	No data available.
Temperature	
Flammable Limits	LEL = 4.1% (Hydrogen Gas in air) ; UEL = 74.2%
Extinguishing	CO2; foam; dry chemical. Do not use carbon dioxide directly on cells. Avoid breathing vapors. Use appropriate media for surrounding fire.
Media	
Unsuitable	
Extinguishing	Water
Media	
Special Fire Fighting Procedures	Use positive pressure, self-contained breathing apparatus. Beware of acid splatter during water application and wear acid-resistant clothing, gloves, face and eye protection. If batteries are on charge, shut off power to the charging equipment, but note that strings of series connected batteries may still pose risk of electric shock even when charging equipment is shut down.
Unusual Fire and Explosion Hazard	Highly flammable hydrogen gas is generated during charging and operation of batteries. If ignited by burning cigarette, naked flame or spark, may cause battery explosion with dispersion of casing fragments and corrosive liquid electrolyte. Carefully follow manufacturer's instructions for installation and service. Keep away all sources of gas ignition and do not allow metallic articles to simultaneously contact the negative and positive terminals of a battery. Follow manufacturer's instructions for installation and service.

3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS (Chemical/Common Names):	CAS No.:	% by Wt:
Inorganic Lead/Lead Compounds	7439-92-1	72
Sulfuric Acid absorbed in Glass-Fiber Material	7664-93-9	28

Composition Comments

All concentrations are in percent by weight.

4. FIRST AID MEASURES

Note: Under normal conditions of battery use, internal components will not present a health hazard. The following information is provided for battery electrolyte (acid) and lead for exposures that may occur during battery production or container breakage or under extreme heat conditions such as fire.

Inhalation	Sulfuric Acid: Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician. Lead: Remove from exposure, gargle, wash nose and lips; consult physician.
Skin contact	Sulfuric Acid: Flush with large amounts of water for at least 15 minutes; remove contaminated clothing completely, including shoes. If symptoms persist, seek medical attention. Wash contaminated clothing before reuse. Discard contaminated shoes. Lead: Wash immediately with soap and water.
Eye contact	Sulfuric Acid and Lead: Flush immediately with large amounts of water for at least 15 minutes while lifting lids; Seek immediate medical attention if eyes have been exposed directly to acid.
Ingestion	Sulfuric Acid: Give large quantities of water; Do NOT induce vomiting or aspiration into the lungs may occur and can cause permanent injury or death; consult physician. Lead: Consult physician immediately.

5. FIRE FIGHTING MEASURES

Flash Point	Not applicable unless individual components exposed.
Auto ignition	No data available.
Temperature	
Flammable Limits	LEL = 4.1% (Hydrogen Gas in air) ; UEL = 74.2%
Extinguishing Media	CO2; foam; dry chemical. Do not use carbon dioxide directly on cells. Avoid breathing vapors. Use appropriate media for surrounding fire.
Unsuitable Extinguishing Media	Water
Special Fire Fighting Procedures	Use positive pressure, self-contained breathing apparatus. Beware of acid splatter during water application and wear acid-resistant clothing, gloves, face and eye protection. If batteries are on charge, shut off power to the charging equipment, but note that strings of series connected batteries may still pose risk of electric shock even when charging equipment is shut down.
Unusual Fire and Explosion Hazard	Highly flammable hydrogen gas is generated during charging and operation of batteries. If ignited by burning cigarette, naked flame or spark, may cause battery explosion with dispersion of casing fragments and corrosive liquid electrolyte. Carefully follow manufacturer's instructions for installation and service. Keep away all sources of gas ignition and do not allow metallic articles to simultaneously contact the negative and positive terminals of a battery. Follow manufacturer's instructions for installation and service.

6: ACCIDENTAL RELEASE MEASURES

Protective Measures to be Taken if Material is Released or Spilled	Stop flow of material, contain/absorb small spills with dry sand, earth, and vermiculite. Do not use combustible materials. If possible, carefully neutralize spilled acid with soda ash, sodium bicarbonate, lime, etc. Wear acid-resistant clothing, boots, gloves, and face shield. Do not allow discharge of un-neutralized acid to sewer. Acid must be managed in accordance with approved local, state, and federal requirements. Consult state environmental agency and/or federal EPA.
Waste Disposal Method	Dispose of as a hazardous waste. Dispose of in accordance with applicable local, state and federal regulations.

7. HANDLING AND STORAGE

Handling & Storage	Store frost-free under roof; prevent short circuits. Do not store in sealed, unventilated areas. Seek agreement with local water authorities in case of larger quantities. Avoid overheating and charging. Do not use organic solvents or anything other than manufacturers recommended cleaners on the batteries. If batteries have to be stored in storage rooms, it is imperative that the instructions for use are observed.
Charging:	There is a possible risk of electric shock from charging equipment and from strings of series connected batteries, whether or not being charged. Shut-off power to chargers whenever not in use and before detachment of any circuit connections. Batteries being charged may generate and release flammable hydrogen gas. Charging space should be ventilated. Prohibit smoking and avoid creation of flames and sparks nearby. Wear face and eye protection when near batteries being charged.
Other	Follow Manufacturers Recommendations regarding maximum recommended currents and operating temperature range. Do not overcharge beyond the recommended upper charging voltage limit. Applying pressure or deforming the battery may lead to disassembly followed by eye, skin and throat irritation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

US OSHA Specifically Regulated Substances (29 CFR 1910.1001 – 1050)

Ingredient	CAS Number	Type	Value
Lead	7439-92-1	TWA	0.05 mg/m ³

US OSHA Table Z-1 Limits for Air Contaminants (29CFR 1910.1000)

Ingredient	CAS Number	Type	Value
Sulfuric Acid Absorbed in Glass Fiber	7664-93-9	PEL	1 mg/m ³

US ACGIH Threshold Limit Values

Ingredient	CAS Number	Type	Value	Form
Lead	7439-92-1	TWA	0.05 mg/m ³	
Sulfuric Acid	7664-93-9	TWA	0.2 mg/m ³	Thoracic Fractions

US NIOSH: Pocket Guide to Chemical Hazards

Ingredient	CAS Number	Type	Value
Lead	7439-92-1	TWA	0.05 mg/m ³
Sulfuric Acid	7664-93-9	TWA	1 mg/m ³

International Exposure Limits (mg/m³)

*Chemical & Common Name	Quebec PEV	Ontario OEL	EU OEL
Lead and Lead Compounds (inorganic)	0.05	0.05	0.15 (a)
Electrolyte (H ₂ SO ₄ /H ₂ O)	1	0.2	0.05 (b)

(a) As inhalable aerosol (b) Thoracic fraction

Biological limit values**ACGIH Biological Exposure Indices**

Ingredient	Value	Determinant	Specimen	Sampling Time
Lead	300 µg/l	Lead	Blood	*

* - For Sampling details please see the source document.

Exposure Guidelines:

The OELs listed above are only applicable if the internal components of the battery cell are released. Follow standard monitoring procedures.

Engineering Controls (Ventilation):

Store sealed lead acid batteries at ambient temperature. Never recharge batteries in an unventilated, enclosed space. Do not subject product to open flame or fire. Avoid conditions that could cause arcing between terminals.

Respiratory Protection (NIOSH/MSHA approved):

NONE REQUIRED FOR NORMAL HANDLING OF THE FINISHED PRODUCT.

When concentrations of sulfuric acid mist are known to exceed PEL, use NIOSH or MSHA-approved respiratory protection.

Skin Protection:

NONE REQUIRED FOR NORMAL HANDLING OF THE FINISHED PRODUCT.

If battery case is damaged, use rubber or plastic acid-resistant gloves with elbow-length gauntlet, acid-resistant apron, clothing and boots.

Eye Protection:

NONE REQUIRED FOR NORMAL HANDLING OF THE FINISHED PRODUCT.

If necessary to handle damaged product where exposure to the organic electrolyte is a possibility, chemical splash goggles and a face shield are recommended.

Other Protection:

Safety footwear meeting the requirements of ANSI Z 41.1 is recommended when it is necessary to handle the finished product.

General Hygiene Considerations:

When using, do not eat, drink, or smoke. Wash hands after handling. Contaminated work clothing should not be allowed out of the workplace. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor	Manufactured article; no apparent odor.
Odor Threshold	Not applicable.
pH	Not applicable
Melting Point	Lead - 621.32 °F (327.4 °C)
	Not applicable unless individual components exposed.
Boiling Point	Battery Electrolyte (Acid) - 230 - 233.6 °F (110 - 112 °C)
	Lead - 3191 °F (1755 °C)
Flash Point	Not applicable.
Evaporation Rate (Butyl Acetate = 1)	Not applicable.
Vapor Pressure (mm Hg @ 20 ° C)	Battery Electrolyte (Acid) 11.7
Flammability	
Upper/lower flammability or explosive limits	Hydrogen Flammability Limit Lower- 4.1 % Flammability Limit Upper – 74.2 %
Vapor Pressure	10.95 mm Hg (Sulfuric Acid)
Vapor Density	Not applicable.
Relative Density	1.21 - 1.3 Battery Electrolyte (Acid)
Solubility	Lead and Lead dioxide are not soluble. 100 % Battery Electrolyte (Acid).
% Volatile by Weight	Not applicable unless individual components exposed.
Partition coefficient (n-octanol/water)	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
Viscosity	Not applicable
Density	11.35 g/cm ³ Lead

10. STABILITY AND REACTIVITY

Reactivity	This product is non-reactive under normal conditions or use, storage, and transport.
Stability	The sealed battery is considered stable.
Conditions to Avoid	Sparks and other sources of ignition; high temperature; over charging.
Incompatibility (materials to avoid)	Acid: Contact with combustibles and organic materials may cause fire and explosion. Also reacts violently with strong reducing agents, metals, sulfur trioxide gas, strong oxidizers, and water. Contact with metals may produce toxic sulfur dioxide fumes and may release flammable hydrogen gas.
	Lead compounds: Avoid contact with strong acids, bases, halides, halogenates, potassium nitrate, permanganate, peroxides, nascent hydrogen, and reducing agents.
Hazardous Decomposition Products	Acid: Sulfur trioxide, carbon monoxide, sulfuric acid mist, sulfur dioxide, hydrogen sulfide.

Hazardous Polymerization

Lead compounds: Temperatures above the melting point are likely to produce toxic metal fume, vapor, or dust; contact with strong acid or base or presence of nascent hydrogen may generate highly toxic arsine gas.
Will not occur.

11. TOXICOLOGICAL INFORMATION

NOTE: Under normal conditions of use, this product does not present a health hazard. The following information is provided for organic electrolyte and lead exposure that may occur due to container breakage or under extreme conditions such as fire.

Organic electrolyte – reacts with moisture/water to produce hydrofluoric acid in trace quantities.

Hydrofluoric acid is extremely corrosive and toxic. In severe exposures it acts as a systemic poison and causes severe burns. The reaction may be delayed. Any contact with this material, even minor, requires immediate medical attention.

ROUTES AND METHODS OF ENTRY

Inhalation	EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE. Sulfuric Acid: Breathing of sulfuric acid vapors or mists may cause severe respiratory irritation. Lead Compounds: Inhalation of lead dust or fumes may cause irritation of upper respiratory tract and lungs.
Skin Contact	EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE. Sulfuric Acid: Severe irritation, burns and ulceration. Lead Compounds: Not absorbed through the skin.
Skin Absorption	EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE. In the event of overcharging or damage to the unit, exposure to organic electrolyte solution/mist is possible. Extreme exposures to the organic electrolyte can be absorbed through the skin.
Eye Contact	EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE. Sulfuric Acid: Severe irritation, burns, cornea damage, and blindness. Lead Compounds: May cause eye irritation.
Ingestion	EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE. Sulfuric Acid: May cause severe irritation of mouth, throat, esophagus and stomach. Lead Compounds: Acute ingestion may cause abdominal pain, nausea, vomiting, diarrhea and severe cramping. This may lead rapidly to systemic toxicity and must be treated by a physician.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Acute Effects	EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE. Sulfuric Acid: Severe skin irritation, damage to cornea, upper respiratory irritation. Lead Compounds: Symptoms of toxicity include headache, fatigue, abdominal pain, loss of appetite, muscular aches and weakness, sleep disturbances and irritability
Chronic Effects	EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE. Sulfuric Acid: Possible erosion of tooth enamel, inflammation of nose, throat & bronchial tubes.

Lead Compounds: Anemia; neuropathy, particularly of the motor nerves, with wrist drop; kidney damage; reproductive changes in males and females. Repeated exposure to lead and lead compounds in the workplace may result in nervous system toxicity. Some toxicologists report abnormal conduction velocities in persons with blood lead levels of 50 µg/100 ml or higher. Heavy lead exposure may result in central nervous system damage, encephalopathy and damage to the blood-forming (hematopoietic) tissues.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Overexposure to sulfuric acid mist may cause lung damage and aggravate pulmonary conditions. Contact of sulfuric acid with skin may aggravate diseases such as eczema and contact dermatitis. Lead and its compounds can aggravate some forms of kidney, liver and neurologic diseases.

ADDITIONAL HEALTH DATA

All heavy metals, including the hazardous ingredients in this product, are taken into the body primarily by inhalation and ingestion. Most inhalation problems can be avoided by adequate precautions such as ventilation and respiratory protection covered in Section 8. Follow good personal hygiene to avoid inhalation and ingestion: wash hands, face, neck and arms thoroughly before eating, smoking or leaving the work site. Keep contaminated clothing out of non-contaminated areas, or wear cover clothing when in such areas. Restrict the use and presence of food, tobacco and cosmetics to non-contaminated areas. Work clothes and work equipment used in contaminated areas must remain in designated areas and never taken home or laundered with personal non-contaminated clothing. This product is intended for industrial use only and should be isolated from children and their environment.

The 19th Amendment to EC Directive 67/548/EEC classified lead compounds, but not lead in metal form, as possibly toxic to reproduction. Risk phrase 61: May cause harm to the unborn child, applies to lead compounds, especially soluble forms.

Toxicological Data

Constituents	Species	Test Results
Sulfuric Acid absorbed in glass-fiber material (CAS 7664-93-9)		
Acute		
<i>Oral</i>		
LD50	Rat	2140 mg/kg
Skin corrosion/irritation	Electrolyte: Causes severe skin burns	
Serious eye damage/eye irritation	Electrolyte: Causes severe skin burns	
Respiratory Sensitization	Not Classified	
Skin Sensitization	Not a skin sensitizer	
Germ Cell Mutagenicity	No data available	

CARCINOGENICITY

Under normal handling and storage conditions, the exposure to carcinogenic components is not expected. Risk of adverse effects occurs only if the cell is mechanically, thermally, or electrically abused to the point of compromising the enclosure.

Sulfuric Acid: The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mist containing sulfuric acid" as a Category I carcinogen, a substance that is carcinogenic to humans. This classification does not apply to liquid forms of sulfuric acid or sulfuric acid solutions contained within a battery. Inorganic acid mist (sulfuric acid mist) is not generated under normal use of this product. Misuse of the product, such as overcharging, may result in the generation of sulfuric acid mist.

Lead Compounds: Lead is listed as a 2B carcinogen, likely in animals at extreme doses. Proof of carcinogenicity in humans is lacking at present.

IARC Monographs. Overall Evaluation of Carcinogenicity

Lead (CAS 7439-92-1)

2B Possibly carcinogenic to humans.

NTP Report on Carcinogens

Lead sulfate (CAS 7446-14-2)

Reasonably Anticipated to be a Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity

May damage fertility or the unborn child.

Specific target organ

No data available.

toxicity -

single exposure

Specific target organ

Lead: May cause damage to organs (blood, central nervous system) through prolonged or repeated exposure.

toxicity -

repeated exposure

Aspiration hazard

Not classified.

12. ECOLOGICAL INFORMATION

Environmental Fate

Lead is very persistent in soil and sediments. No data on environmental degradation. Mobility of metallic lead between ecological compartments is slow. Bioaccumulation of lead occurs in aquatic and terrestrial animals and plants but little bioaccumulation occurs through the food chain. Most studies include lead compounds and not elemental lead

Ecotoxicity

Very toxic to aquatic life with long lasting effects. However, no ecological impacts expected under normal use conditions.

Constituents

Species

Test Results

Inorganic Lead/Lead Compounds (CAS 7439-92-1)

Aquatic

Fish

LC50

Rainbow trout, Donaldson trout
(Oncorhynchus mykiss)

1.17 mg/l, 96 hours

**Persistence and
Degradability**

No data available

Bioaccumulative potential

No data available

Additional Information

No known effects on stratospheric ozone depletion

Volatile organic compounds: 0% (by Volume)

Water Endangering Class (WGK): NA

13. DISPOSAL CONSIDERATIONS

Waste disposal method

Material should be recycled if possible. Lead-acid batteries are completely recyclable. Product can be recycled along with automotive (SLI) lead-acid batteries. Dispose waste and residues in accordance with applicable federal, state, and local regulations.

Hazardous waste code

D008: Lead

**Waste from residues /
unused products**

Dispose of in accordance with local regulations. Empty containers or packaging may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

Note: Transportation requirements do not apply once the battery pack has been installed in a vehicle as part of the vehicle's functional components.

Transportation: Absorptive Glass-Fiber Material Lead Acid Battery is not a DOT Hazardous Material

Other: Per DOT, IATA, ICAO, and IMDG rules and regulations, these batteries are exempt from "UN2800" classification as a result of successful completion of the following tests:

- 1.) Vibration tests
- 2.) Pressure Differential Tests
- 3.) Case Rupturing Tests (no free liquids)

GROUND – US-DOT/CAN-TDG/EU-ADR/APEC-ADR:

Not regulated as dangerous goods per 49 CFR 173.159a

AIRCRAFT – ICAO-IATA:

Not regulated as dangerous goods per Special Provision A67

VESSEL – IMO-IMDG:

Not regulated as dangerous goods per exception 238

All Interstate Batteries brand and Power Patrol brand sealed lead-acid batteries are "Non-Spillable batteries" as defined by the Hazardous Materials regulations according to 49 CFR 173.159a and the Transport Canada Dangerous Goods regulations according to Part 12.9(11)(a)(ii)(B).

Non-spillable batteries may be transported by air, truck, and boat and are excepted from the packaging requirements of §173.159 under the following conditions which are found in 49 Code of Federal Regulations 173.159a, the ICAO/IATA Special Provision A67, the ICAO/IATA Packing Instruction # 872, and IMDG Special Provision 238 which are printed below

49 CFR 173.159a states:

- (1) The battery must be securely packed in strong outer packaging, terminals are protected against short circuits, and meet the requirements of 49 CFR §173.159(a).
- (2) A non-spillable battery which is an integral part of and necessary for the operation of mechanical or electronic equipment must be securely fastened in the battery holder on the equipment and protected in such a manner as to prevent damage and short circuits.
- (3) The battery and outer packaging must be plainly and durably marked "NON-SPILLABLE" or "NON-SPILLABLE BATTERY." The requirement to mark the outer package does not apply when the battery is installed in a piece of equipment that is transported unpackaged.

If the battery complies with the 3 conditions listed above then the Shipping Paper does not need to show the UN Number, the shipping name, hazard class, and Packing Group. Also, Hazardous labels are not required.

For Shipment by Air: ICAO/IATA SPECIAL PROVISION A67

A67 Non-spillable batteries meeting the requirements of Packing Instruction 872 are not subject to these Regulations if, at a temperature of 55°C (131°F), the electrolyte will not flow from a ruptured or cracked case. The battery must not contain any free or unabsorbed liquid. Any electrical battery or battery powered device, equipment or vehicle having the potential of dangerous evolution of heat must be prepared for transport so as to prevent:

- (a) a short circuit (e.g. in the case of batteries, by the effective insulation of exposed terminals; or in the case of equipment, by disconnection of the battery and protection of exposed terminals); and
- (b) unintentional activation

The words “Not Restricted” and the Special Provision number A67 must be included in the description of the substance on the Air Waybill as required by 8.2.6, when an Air Waybill is issued.

IMDG Special Provision 238

238 (a) Batteries can be considered as non-spillable provided that they are capable of withstanding the vibration and pressure differential tests, without leakage of battery fluid.

15. REGULATORY INFORMATION

This product is an article pursuant to 29 CFR 1910.1200 and as such is not subjected to the OSHA Hazard Communication Standard. The information on this SDS is supplied at customer's request for information only

TSCA

Ingredients listed in the TSCA registry are lead, lead compounds, and sulfuric acid.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Lead (CAS 7439-92-1)	Reproductive toxicity
	Central nervous system
	Kidney
	Blood
	Acute toxicity

CERCLA Hazardous Substance List (40 CFR 302.4)

Lead (CAS 7439-92-1)	LISTED
Sulfuric Acid absorbed in Glass-fiber Material (CAS 7664-93-9)	LISTED

Superfund Amendment and Reauthorization Act of 1986 (SARA)

Hazard Categories	Immediate Hazard – Yes
	Delayed Hazard – Yes
	Fire Hazard – Yes
	Pressure Hazard – Yes
	Reactivity Hazard – Yes

SARA 302 Extremely hazardous substance

Chemical Name	CAS Number	Reportable Quantity	Threshold Planning Quantity	Threshold Planning Quantity – Lower value	Threshold Planning Quantity – upper value
Sulfuric Acid absorbed in Glass-fiber Material	7664-93-9	1000	1000 lbs		

Section 311/312 Hazard Categorization:

EPCRA Section 312 Tier Two reporting is required for non-automotive batteries if sulfuric acid is present in quantities of 500 lbs. or more and/or if lead is present in quantities of 10,000 lbs. or more. For more information consult 40 CFR 370.10 and 40 CFR 370.40

Section 313 EPCRA Toxic Substances:

40 CFR section 372.38 (b) states: If a toxic chemical is present in an article at a covered facility, a person is not required to consider the quantity of the toxic chemical present in such article when determining whether an applicable threshold has been met under § 372.25, § 372.27, or § 372.28 or determining the amount of release to be reported under § 372.30. This exemption applies whether the person received the article from another person

or the person produced the article. However, this exemption applies only to the quantity of the toxic chemical present in the article.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Lead (CAS 7439-92-1)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Sulfuric Acid absorbed in Glass-fiber Material (CAS 7664-93-9)

Safe Drinking Water Act (SDWA)

Not regulated

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Sulfuric Acid absorbed in Glass-fiber Material (CAS 7664-93-9) 6552

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Sulfuric Acid absorbed in Glass-fiber Material (CAS 7664-93-9) 20 % WV

DEA Exempt Chemical Mixtures Code Number

Sulfuric Acid absorbed in Glass-fiber Material (CAS 7664-93-9) 6552

US State Regulations

US. Massachusetts RTK – Substance List

Lead (CAS 7439-92-1)
Sulfuric Acid absorbed in Glass-fiber Material (CAS 7664-93-9)

US New Jersey Worker and Community Right-to-know Act

Lead (CAS 7439-92-1)
Sulfuric Acid absorbed in Glass-fiber Material (CAS 7664-93-9)

US Pennsylvania Worker and Community Right-to-know Law

Lead (CAS 7439-92-1)
Sulfuric Acid absorbed in Glass-fiber Material (CAS 7664-93-9)

US Rhode Island RTK

Lead (CAS 7439-92-1)
Sulfuric Acid absorbed in Glass-fiber Material (CAS 7664-93-9)

US. California Proposition 65

WARNING: This product contains chemicals known to the State of California to cause cancer.
Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the state of California to cause cancer and reproductive harm. Wash hands after handling.

*Battery companies not party to the 1999 consent judgment with Mateel Environmental Justice Foundation should include a Proposition 65 Warning that complies with the current version of Proposition 65.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Lead (CAS 7439-92-1)
Sulfuric Acid absorbed in Glass-fiber Material (CAS 7664-93-9)

International Inventories

Country(s) or Region	Inventory Name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

* A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

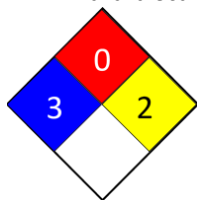
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. OTHER INFORMATION

Revision Date:
Further information:
NFPA ratings

6/18/2019

NFPA Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3=Serious 4 = Severe



Disclaimer

Interstate Batteries, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.